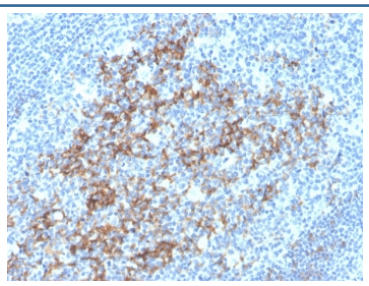
CD23 Antibody - Protein Microarray Validated [clone FCER2/3592] (V7565)

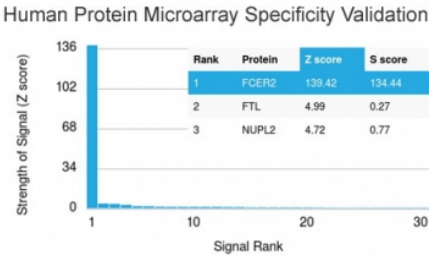
Catalog No.	Formulation	Size
V7565-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7565-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7565SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V7565IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

Bulk quote request

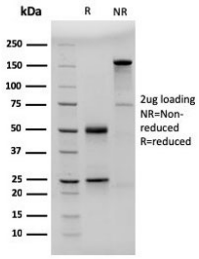
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	FCER2/3592
Purity	Protein G affinity chromatography
UniProt	P06734
Localization	Cell surface, cytoplasmic
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This CD23 antibody is available for research use only.



Immunohistochemistry of CD23 Antibody in human tonsil. FFPE human tonsil tissue was stained with CD23 antibody (clone FCER2/3592). Distinct membranous HRP-DAB brown staining is observed in B lymphocytes within germinal centers and mantle zone regions, consistent with known CD23 expression on mature follicular B cells. The staining pattern highlights follicular architecture, with dense positivity in B cell rich areas and minimal staining in surrounding T cell predominant interfollicular regions. Heat induced epitope retrieval was performed by boiling tissue sections in pH 6 citrate buffer for 10-20 minutes followed by cooling prior to antibody incubation.



Protein microarray validation of CD23 Antibody - Protein Microarray Validated (clone FCER2/3592). Analysis of the HuProt microarray containing more than 19,000 full-length human proteins was performed using CD23 antibody clone FCER2/3592. The antibody demonstrates highest reactivity with FCER2, confirming target specificity, with markedly lower signal intensity observed for non-target proteins. These results support the specificity of the FCER2/3592 monoclonal antibody for CD23.
Z- and S-score explanation: The Z-score represents the strength of the fluorescent signal generated when the antibody binds to a specific protein on the HuProt array, expressed as standard deviations above the mean signal of all proteins on the array. When proteins are ranked in descending order by Z-score, the S-score represents the difference in Z-scores between sequentially ranked proteins. The S-score therefore reflects the relative specificity of the antibody for its intended target compared to other proteins present on the array.



SDS-PAGE analysis of purified, BSA-free CD23 antibody (clone FCER2/3592) as confirmation of integrity and purity.

Description

CD23 Antibody - Protein Microarray Validated clone FCER2/3592 recognizes CD23, a type II transmembrane glycoprotein encoded by the FCER2 gene on chromosome 19p13.3. CD23 is also known as Low affinity immunoglobulin epsilon Fc receptor or Fc epsilon receptor II and belongs to the C-type lectin family. It functions as the low affinity receptor for IgE and plays an important role in regulating IgE mediated immune responses and B cell biology. CD23 is primarily expressed on mature B lymphocytes, with additional expression reported in certain activated immune cell populations.

Structurally, CD23 contains a short N-terminal cytoplasmic domain, a single transmembrane segment, and a large extracellular C-type lectin-like domain responsible for IgE binding. CD23 can exist in both membrane bound and soluble forms, the latter generated by proteolytic cleavage. Through interactions with IgE and CD21, CD23 participates in antigen presentation, modulation of IgE synthesis, and regulation of B cell activation and differentiation. Subcellular localization is predominantly membranous, often accompanied by variable cytoplasmic staining depending on cellular activation state.

In normal tissues, CD23 expression is most prominent in secondary lymphoid organs such as tonsil, lymph node, and spleen. Within these tissues, CD23 is characteristically expressed by follicular B cells in germinal centers and mantle zones, where it contributes to humoral immune regulation. The staining pattern typically highlights follicular architecture, with strong membranous labeling in B cell rich regions and limited staining in T cell predominant interfollicular areas. CD23 antibody is widely used in research settings to study B cell subsets, germinal center reactions, and immune activation.

Protein microarray validation demonstrates high specificity of clone FCER2/3592 for its intended target across a broad panel of human proteins. Such validation supports its utility for detecting CD23 expression in research applications focused on immunology, allergy related mechanisms, and lymphoid tissue biology.

Application Notes

Optimal dilution of the CD23 antibody should be determined by the researcher.
1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

A recombinant human FCER2/CD23 protein fragment within amino acids 48-321 was used as the immunogen for the CD23 antibody protein microarray validated clone FCER2/3592.

Storage

Store the CD23 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).